

1 **CLAIMS**

2 We claim:

3
4 1. A method comprising:
5 presenting a word processing table within a document; and
6 exhibiting spreadsheet features together with the word processing table
7 when a user is editing the word processing table.

8
9 2. The method of claim 1, wherein the document is a markup document,
10 and the presenting comprises rendering the markup document.

11
12 3. The method of claim 1, wherein the word processing table has rows
13 and columns, and the exhibiting comprises depicting row headers for the rows and
14 column headers for the columns.

15
16 4. The method of claim 1, wherein the word processing table has rows
17 and columns, and the exhibiting comprises depicting a row addition control for
18 adding one or more rows to the word processing table and a column addition
19 control for adding one or more columns to the word processing table.

20
21 5. The method of claim 1, further comprising:
22 determining, upon selection of a cell in the word processing table, a type of
23 contents in the cell; and
24 interpreting user entry based upon the type of contents in the cell.
25

1 6. The method of claim 5, wherein the determining comprises:
2 evaluating whether the type of contents is a formula or non-text data;
3 if the type of contents is a formula or non-text data, interpreting the user
4 entry as applicable to spreadsheet functions; and
5 if the type of contents is not a formula or non-text data, interpreting the user
6 entry as applicable to word processing functions.

7
8 7. The method of claim 5, wherein the determining comprises:
9 evaluating whether the type of contents is a formula;
10 if the type of contents is a formula, highlighting all of the formula and
11 allowing editing in a formula edit box; and
12 if the type of contents is not a formula, placing a cursor in the cell.

13
14 8. The method of claim 1, wherein the word processing table has
15 multiple cells, the method further comprising overlaying a formula edit box on a
16 particular cell in the table to facilitate user entry of a formula into the particular
17 cell.

18
19 9. The method of claim 8, further comprising resizing the formula edit
20 box as the user enters the formula, while maintaining the particular cell and table
21 as a whole at a constant size.

22
23 10. The method of claim 1, further comprising:
24 presenting multiple word processing tables; and
25

1 enabling a user to reference a cell in a first word processing table when
2 entering a formula in a cell in a second word processing table.

3
4 **11.** The method of claim 1, further comprising:
5 presenting a free floating field; and
6 enabling a user to reference a cell in the word processing table when
7 entering a formula into the free floating field.

8
9 **12.** The method of claim 1, further comprising:
10 modifying a value in a cell of the word processing table; and
11 upon modification, automatically recalculating any formula in the word
12 processing table that is affected by the modification.

13
14 **13.** A computer readable medium having computer-executable
15 instructions that, when executed on one or more processors, perform the method as
16 recited in claim 1.

17
18 **14.** A method comprising:
19 presenting a word processing table, the table having multiple cells; and
20 overlaying a formula edit box on a particular cell in the table to facilitate
21 user entry of a formula into the particular cell.

22
23 **15.** The method of claim 14, wherein the formula edit box initially
24 defaults to a size and shape of the particular cell in the table.

1 **16.** The method of claim 14, further comprising resizing the formula
2 edit box as the user enters the formula.

3
4 **17.** The method of claim 14, further comprising resizing the formula
5 edit box as the user enters the formula, while maintaining the particular cell and
6 table at a constant size.

7
8 **18.** The method of claim 14, further comprising extending the formula
9 edit box horizontally and subsequently enlarging the formula edit box vertically as
10 the user enters the formula.

11
12 **19.** The method of claim 14, further comprising enabling a user to
13 reference another cell in the table to add a reference to the formula.

14
15 **20.** The method of claim 14, further comprising:
16 presenting multiple tables; and
17 enabling a user to reference a cell in another table to add a variant to the
18 formula.

19
20 **21.** The method of claim 14, further comprising:
21 presenting a free floating field; and
22 enabling a user to reference the free floating field to add a variant to the
23 formula.

1 **22.** A computer readable medium having computer-executable
2 instructions that, when executed on one or more processors, perform the method as
3 recited in claim 14.

4
5 **23.** A method comprising:
6 presenting first and second tables, the first table having a first cell with
7 contents; and
8 enabling a user to reference the first cell in the first table when entering a
9 formula in a second cell in the second table.

10
11 **24.** The method of claim 23, wherein the first and second tables
12 resemble a spreadsheet when being edited.

13
14 **25.** The method of claim 23, wherein the first and second tables reside
15 in separate documents.

16
17 **26.** The method of claim 23, wherein the enabling comprises facilitating
18 user selection of the first cell using a pointer to reference the first cell.

19
20 **27.** The method of claim 23, further comprising overlaying a formula
21 edit box on the second cell in the second table to facilitate user entry of the
22 formula into the second cell.

1 **28.** The method of claim 23, further comprising nesting the first table
2 within a cell in the second table.

3
4 **29.** The method of claim 23, further comprising, upon modification of
5 the contents in the first cell of the first table, automatically recalculating the
6 formula in the second cell of the second table.

7
8 **30.** The method of claim 23, further comprising:
9 presenting a free floating field; and
10 enabling a user to reference a cell in one of the first and second tables.

11
12 **31.** A computer readable medium having computer-executable
13 instructions that, when executed on one or more processors, perform the method as
14 recited in claim 23.

15
16 **32.** A method comprising:
17 presenting first and second tables; and
18 constructing a formula in the second table that references contents in the
19 first table.

20
21 **33.** The method of claim 32, wherein the first and second tables are
22 within a common document.
23
24
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1 34. The method of claim 32, further comprising nesting the first table
2 within a cell in the second table.

3
4 35. The method of claim 32, further comprising, upon modification of
5 the contents in the first table, automatically recalculating the formula in the second
6 table.

7
8 36. The method of claim 32, further comprising facilitating user
9 selection of a cell in the first table using a pointer to create a variant in the
10 formula.

11
12 37. The method of claim 32, further comprising:
13 presenting a free floating field; and
14 constructing a formula in the free floating field that references contents in
15 one of the first and second tables.

16
17 38. A computer readable medium having computer-executable
18 instructions that, when executed on one or more processors, perform the method as
19 recited in claim 32.

20
21 39. A method comprising:
22 presenting first and second spreadsheet tables, the spreadsheet tables
23 supporting spreadsheet functionality; and
24 nesting the first table within the second table.
25

1 **40.** The method of claim 39, further comprising constructing a formula
2 in the second table that references contents in the first table.

3
4 **41.** The method of claim 40, further comprising, upon modification of
5 the contents in the first table, automatically recalculating the formula in the second
6 table.

7
8 **42.** A computer readable medium having computer-executable
9 instructions that, when executed on one or more processors, perform the method as
10 recited in claim 39.

11
12 **43.** A method comprising:
13 presenting a table user interface (UI), the table UI resembling a table when
14 not being edited and adding spreadsheet elements to the table when being edited;
15 enabling a user to enter data and one or more formulas into the table UI;
16 and
17 upon modification of the data or one or more formulas in the table,
18 automatically recalculating any of the one or more formulas affected by the
19 modification and presenting the table UI with results from the recalculating.

20
21 **44.** The method of claim 43, wherein the presenting comprises
22 rendering the table UI as an HTML table.

1 **45.** The method of claim 43, further comprising overlaying a formula
2 edit box on the table UI to facilitate user entry of a formula into the table UI.

3
4 **46.** The method of claim 43, further comprising:
5 presenting a free floating field user interface (UI); and
6 enabling a user to enter a formula into the free floating field UI that
7 references contents of the table UI.

8
9 **47.** The method of claim 46, further comprising upon modification of
10 the contents of the table, automatically recalculating the formula in the free
11 floating field UI.

12
13 **48.** The method of claim 43, wherein the table UI is a first table UI, and
14 further comprising:
15 copying the first table UI and pasting to form a second table UI; and
16 automatically updating the formulas in the first and second table UI to
17 make appropriate references.

18
19 **49.** A computer readable medium having computer-executable
20 instructions that, when executed on one or more processors, perform the method as
21 recited in claim 43.

1 **50.** A method comprising:

2 displaying a document with both text and a spreadsheet table, the
3 spreadsheet table resembling a word processing table in appearance and
4 supporting spreadsheet functionality; and

5 enabling a user to format the text according to a particular format; and
6 formatting cells in the spreadsheet table according to the particular format.
7

8 **51.** A computer readable medium having computer-executable
9 instructions that, when executed on one or more processors, perform the method as
10 recited in claim 50.
11

12 **52.** A method comprising:

13 displaying a document with both text and a spreadsheet table, the
14 spreadsheet table resembling a word processing table in appearance and
15 supporting spreadsheet functionality; and

16 enabling a user to evaluate the text and the spreadsheet table for possible
17 spelling or grammatical errors via actuation of a single control.
18

19 **53.** A computer readable medium having computer-executable
20 instructions that, when executed on one or more processors, perform the method as
21 recited in claim 52.
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1 **54.** A method comprising:

2 displaying a document with both text and a spreadsheet table, the
3 spreadsheet table resembling a word processing table in appearance and
4 supporting spreadsheet functionality; and

5 enabling a user to select a control function to modify or evaluate an aspect
6 of the document; and

7 applying the control function across both the text and the spreadsheet table.
8

9 **55.** The method of claim 54, wherein the control function is selected
10 from a group of functions including formatting, spell checking, grammar
11 checking, find, find and replace, auto-correct, applying document themes,
12 inserting lists, images, drawings, charts, hyperlinks, automatic detection of
13 hyperlinks, and list autodetection.
14

15 **56.** The method of claim 54, wherein the control function is any text
16 feature that can be applied to the text and the applying comprises applying that
17 text feature to the spreadsheet table.
18

19 **57.** A computer readable medium having computer-executable
20 instructions that, when executed on one or more processors, perform the method as
21 recited in claim 54.
22

23 **58.** A user interface comprising:

24 a table residing within a document, the table having multiple cells; and
25

1 a formula edit box overlaid on a particular cell in the table to facilitate user
2 entry of a formula into the particular cell.

3
4 **59.** The user interface of claim 58, wherein the cells are arranged in
5 rows and columns, and the table has row headers to identify the rows of cells and
6 column headers to identify the columns of cells.

7
8 **60.** The user interface of claim 58, wherein the cells are arranged in
9 rows and columns, and the table has a row addition control for adding one or more
10 rows to the table and a column addition control for adding one or more columns to
11 the table.

12
13 **61.** The user interface of claim 58, wherein the formula edit box initially
14 defaults to a size and shape of the particular cell in the table.

15
16 **62.** The user interface of claim 58, wherein the formula edit box
17 dynamically resizes as the user enters the formula.

18
19 **63.** The user interface of claim 58, wherein the formula edit box extends
20 horizontally and subsequently enlarges vertically as the user enters the formula.

21
22 **64.** A user interface comprising:
23 a table having rows and columns of cells;
24 a row addition control adjacent a lowermost row in the table, the row
25 addition control facilitating addition of one or more rows to the table; and

1 a column addition control adjacent an outermost column in the table, the
2 column addition control facilitating addition of one or more columns to the table.
3

4 **65.** A user interface comprising:
5 multiple tables, each table having multiple cells; and
6 an entry tool to facilitate entry of a formula in a first table that references
7 contents in a second table.
8

9 **66.** The user interface of claim 65, wherein the entry tool comprises a
10 formula edit box overlaid on a particular cell in the first table to facilitate user
11 entry of the formula into the particular cell.
12

13 **67.** The user interface of claim 65, wherein the entry tool comprises
14 referencing a particular cell in the second table using a pointer and adding a
15 variable to the formula that references the particular cell.
16

17 **68.** A user interface comprising:
18 a first spreadsheet table supporting spreadsheet functionality and having
19 multiple cells; and
20 a second spreadsheet table nested within a cell of the first table.
21

22 **69.** The user interface of claim 68, wherein one of the first and second
23 tables contains a formula referencing contents of the other of the first and second
24 tables.
25

1 **70.** An architecture comprising:

2 a user interface to present at least one table;

3 a table appearance manager to manage how a table appears in the user
4 interface such that the table resembles a table when not being edited and adds
5 spreadsheet elements to the table when being edited; and

6 a spreadsheet functionality manager to manage spreadsheet functions for
7 the table.

8
9 **71.** The architecture of claim 70, wherein the user interface overlays a
10 formula edit box on a particular cell in the table to facilitate user entry of a
11 formula into the particular cell.

12
13 **72.** The architecture of claim 70, wherein the table appearance manager
14 comprises:

15 a table component to support editing functionality of the table; and

16 a spreadsheet component to receive data and formulas input into the table.

17
18 **73.** The architecture of claim 70, wherein the spreadsheet functionality
19 manager comprises:

20 a cell table to maintain data values and formulas used in the table; and

21 a format table to maintain formatting information used in the table.

22
23 **74.** The architecture of claim 70, wherein the spreadsheet functionality
24 manager comprises:

25 a cell table to maintain data values and formulas used in the table; and

1 a recalculation engine to recalculate the formulas following a change to a
2 data value or formula in the cell table.

3
4 **75.** The architecture of claim 70, wherein the user interface presents
5 multiple tables, and the spreadsheet functionality manager is configured to track
6 references made from one table to another table.

7
8 **76.** The architecture of claim 70, wherein the user interface presents
9 multiple tables, and the spreadsheet functionality manager is configured to
10 maintain data and formulas for the multiple tables and track references made from
11 one table to another table, the spreadsheet functionality manager being further
12 configured to update any data and formulas in the multiple tables that is affected
13 by a change made to one of the tables.

14
15 **77.** A computer readable medium having computer-executable
16 instructions that, when executed on one or more processors, performs the
17 following:

18 present first and second tables; and
19 create a reference from the first table to contents of the second table; and
20 upon modification of the contents in the second table, update the first table.

21
22 **78.** The computer readable medium of claim 77, further comprising
23 computer-executable instructions to overlay an entry field on a particular cell in
24 the table to facilitate user entry of a formula into the particular cell.
25

1 **79.** The computer readable medium of claim 77, further comprising
2 computer-executable instructions to present a free floating field and create a
3 reference from the free floating field to one of the first and second tables.
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5 **80.** The computer readable medium of claim 77, further comprising
6 computer-executable instructions to nest the first table within the second table.
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